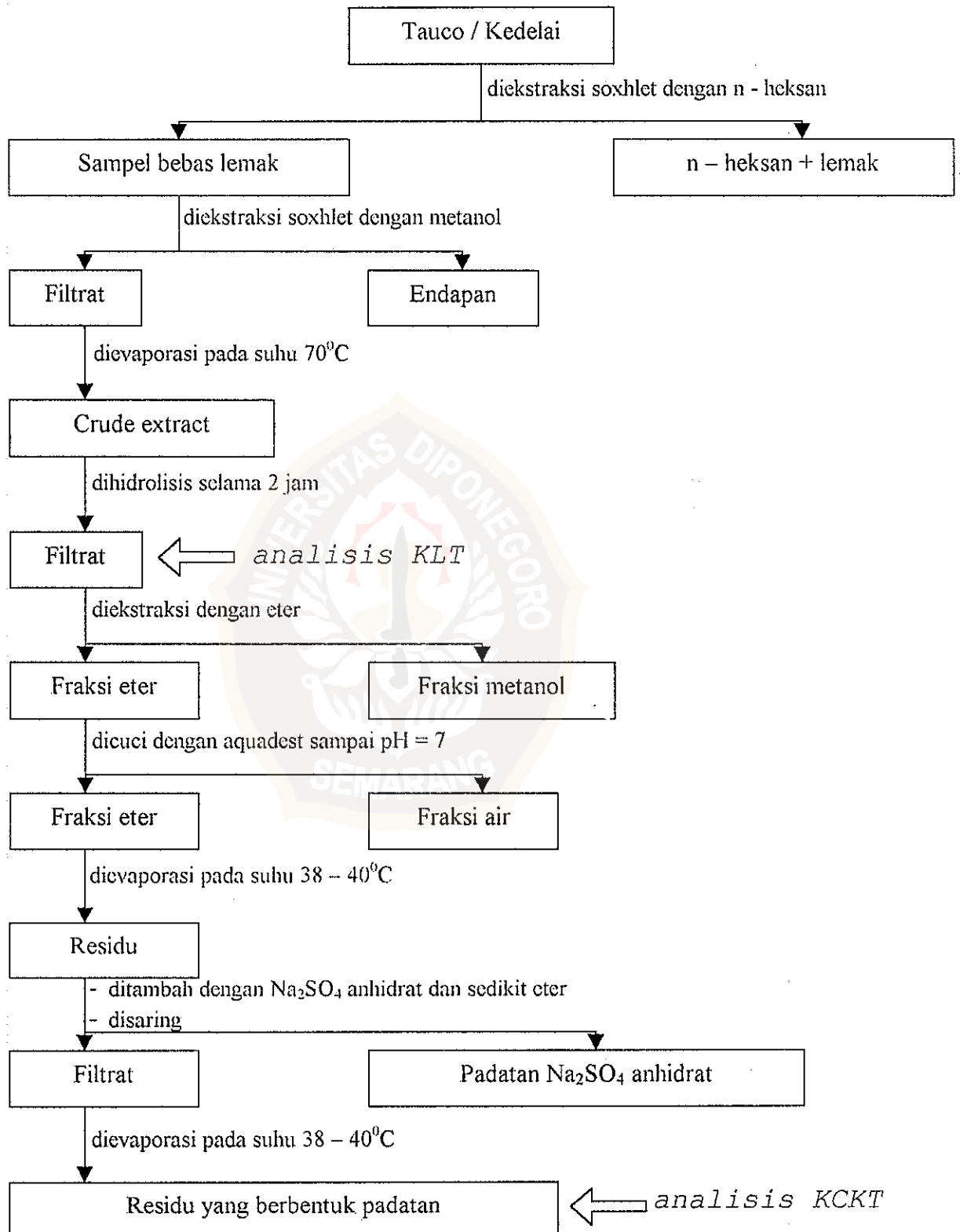
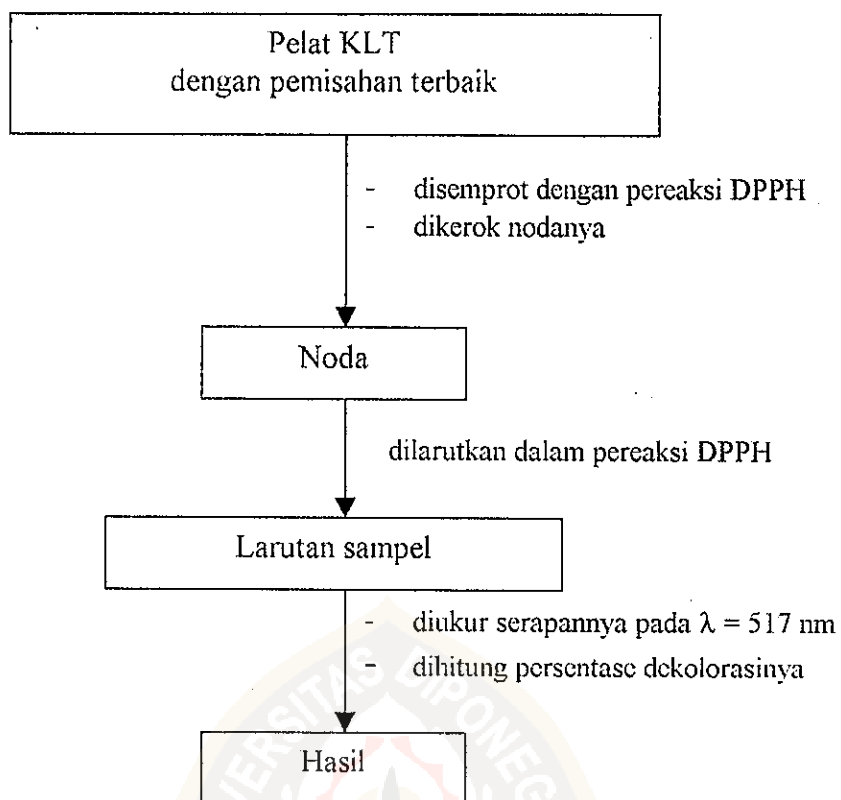


### Lampiran 1. Prosedur Kerja

#### 1. Isolasi dan Identifikasi Senyawa Isoflavon Tauco & Kedelai dengan KCKT



## 2. Penentuan Aktivitas Antioksidan Isoflavon Tauco dan Kedelai



## Lampiran 2. Perhitungan Konsentrasi Komponen Daidzein dan Genistein dalam Sampel

*Persamaan untuk menghitung konsentrasi standar :*

$$C_{std} = \frac{\frac{h}{f (\mu L)} \times e (\mu g)}{g}$$

h = volume injeksi	= 20 $\mu$ L
f = volume pelarutan	= 10 mL
e = berat standar	= 0,01 gram
g = pengenceran	= 200 kali

*Persamaan untuk menghitung konsentrasi sampel :*

$$C_{spl} = \frac{A_{spl}}{A_{std}} \times C_{std} \times c$$

$$\% b / b = \frac{\frac{100}{a} \times \frac{b (\mu L)}{d} \times C_{spl}}{100}$$

c = pengenceran	= 10 kali
a = berat sampel	= 1 gram
b = volume pelarutan	= 1 mL
d = volume injeksi	= 20 $\mu$ L

### 1. Konsentrasi senyawa standar daidzein dan genistein

$$C \text{ standar} = [(20/10000) \times 10000] : 200$$

$$= 0,1$$

## 2. Konsentrasi daidzein dan genistein dalam sampel tauco

### a) Konsentrasi daidzein

$$A \text{ std daidzein} = 470932 \text{ satuan luas}$$

$$A \text{ spl daidzein} = 1021670 \text{ satuan luas}$$

$$C \text{ spl daidzein} = (1021670/470932) \times 0,1 \times 10 \\ = 2,170$$

$$\% \text{ b/b daidzein} = [(100/1) \times (1000/20) \times 2,170] : 100 \\ = 108,5 \text{ mg/100 g sampel}$$

### b) Konsentrasi genistein

$$A \text{ std genistein} = 295382,33 \text{ satuan luas}$$

$$A \text{ spl genistein} = 250791,5 \text{ satuan luas}$$

$$C \text{ spl genistein} = (250791,5/295382,33) \times 0,1 \times 10 \\ = 0,849$$

$$\% \text{ b/b genistein} = [(100/1) \times (1000/20) \times 0,849] : 100 \\ = 42,5 \text{ mg/100 g sampel}$$

## 3. Konsentrasi daidzein dan genistein dalam sampel kedelai

### a) Konsentrasi daidzein

$$A \text{ std daidzein} = 470932 \text{ satuan luas}$$

$$A \text{ spl daidzein} = 1023741,5 \text{ satuan luas}$$

$$C \text{ spl daidzein} = (1023741,5/470932) \times 0,1 \times 10 \\ = 2,173$$

$$\% \text{ b/b daidzein} = [(100/1) \times (1000/20) \times 2,173] : 100 \\ = 108,6 \text{ mg/100 g sampel}$$

### b) Konsentrasi genistein

$$A \text{ std genistein} = 295382,33 \text{ satuan luas}$$

$$A \text{ spl genistein} = 194641,5 \text{ satuan luas}$$

$$C \text{ spl genistein} = (194641,5/295382,33) \times 0,1 \times 10 \\ = 0,659$$

$$\% \text{ b/b genistein} = [(100/1) \times (1000/20) \times 0,659] : 100 \\ = 32,9 \text{ mg/100 g sampel}$$